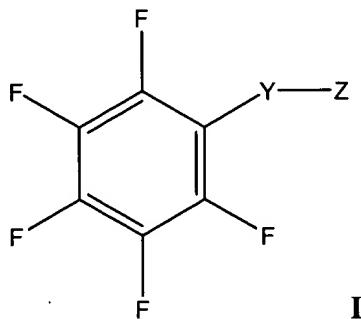


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of formula I:



or a pharmaceutically acceptable salt thereof, wherein:

Y is -S(O)- or -S(O)₂-; and

Z is -NR¹R²; wherein R² is optionally substituted heteroaryl and R¹ is selected from

hydrogen,

substituted or unsubstituted (C1-C10)alkyl,

substituted or unsubstituted (C1-C10)alkoxy,

substituted or unsubstituted (C3-C6)alkenyl,

substituted or unsubstituted (C2-C6)heteroalkyl,

substituted or unsubstituted (C3-C6)heteroalkenyl,

substituted or unsubstituted (C3-C6)alkynyl,

substituted or unsubstituted (C3-C8)cycloalkyl,

substituted or unsubstituted (C5-C7)cycloalkenyl,

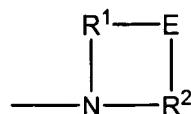
substituted or unsubstituted (C5-C7)cycloalkadienyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aryloxy,

substituted or unsubstituted aryl-(C3-C8)cycloalkyl,
substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,
substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,
substituted or unsubstituted aryl-(C1-C4)alkyl,
substituted or unsubstituted aryl-(C1-C4)alkoxy,
substituted or unsubstituted aryl-(C3-C6)alkenyl,
substituted or unsubstituted aryloxy-(C1-C4)alkyl
substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,
substituted or unsubstituted heteroaryl,
substituted or unsubstituted heteroaryloxy,
substituted or unsubstituted heteroaryl-(C1-C4)-alkyl,
substituted or unsubstituted heteroaryl-(C1-C4)alkoxy,
substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,
substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,
substituted or unsubstituted heteroaryloxy-(C1-C4)alkyl, and
substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl,

wherein R¹ and R² of -NR¹R² may be connected by a linking group E to give a substituent of the formula



wherein E represents a bond, (C1-C4) alkylene, or (C1-C4) heteroalkylene and the ring formed by R¹, E, R² and the nitrogen atom contains no more than 8 atoms;

provided that:

in the case that Y is -S(O₂)-, and R¹ is hydrogen or methyl, then R² is substituted heteroaryl group;

in the case that Y is -S(O₂)-, and R² is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R¹ is not hydrogen or R² is substituted by at least one substituent that is not hydrogen;

Amdt. dated January 10, 2005

Reply to Office Action of September 10, 2004

in the case that Y is $-S(O_2)-$ and R^2 is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-1-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-1,3,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-1,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen.

~~wherein said compound has pharmacological activity.~~

Claim 2 (currently amended): The composition of claim 1, wherein, ~~in the compound of formula I,~~

Y is SO_2-SO_2- and

Z is NR^1R^2 , wherein R^2 is optionally substituted heteroaryl.

Claim 3 (previously presented): The composition of claim 2, wherein R^1 is hydrogen or lower alkyl, R^2 is optionally substituted pyridyl, and there is no linking group E between R^1 and R^2 .

Claims 4-10 (canceled).

Claim 11 (previously presented): The composition of claim 1, wherein the compound is

5-Pentafluorophenylsulfonamidoindazole, or

5-Pentafluorophenylsulfonamidoindole.

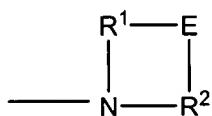
Claims 12- 17 (canceled).

Claim 18 (currently amended): The composition of claim 1, wherein the compound is selected from the group consisting of 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; ~~2,3-Dihydro-5-pentafluorophenylsulfonamidoindole;~~

5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzó[a]furan; 5-Pentafluorophenylsulfonamidoindazole; 2-Methoxy-5-pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claims 19- 35 (canceled).

Claim 36 (previously presented): The composition of claim 2, wherein



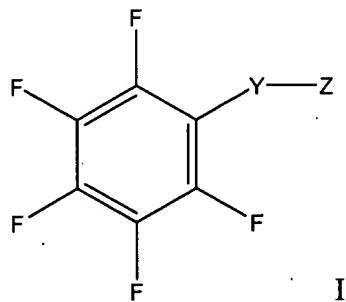
is a 5- or 6-membered heterocyclic ring.

Claims 37-40 canceled.

Claim 41 (original): The composition of claim 2, wherein R¹ is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 42 (canceled).

Claim 43 (currently amended): A method of treating ~~or preventing~~ a disease state characterized by abnormally high low density lipoprotein particles or cholesterol levels in the blood, which method comprises administering to a mammalian subject in need thereof a therapeutically effective amount of a composition containing a compound of formula I



or a pharmaceutically acceptable salt thereof, wherein:

Y is -S(O)- or -S(O)₂-;

Z is -NR¹R²; where R² is optionally substituted heteroaryl and R¹ is selected from hydrogen,

substituted or unsubstituted (C1-C10)alkyl,

substituted or unsubstituted (C1-C10)alkoxy,

substituted or unsubstituted (C3-C6)alkenyl,

substituted or unsubstituted (C2-C6)heteroalkyl,

substituted or unsubstituted (C3-C6)heteroalkenyl,

substituted or unsubstituted (C3-C6)alkynyl,

substituted or unsubstituted (C3-C8)cycloalkyl,

substituted or unsubstituted (C5-C7)cycloalkenyl,

substituted or unsubstituted (C5-C7)cycloalkadienyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aryloxy,

substituted or unsubstituted aryl-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,

substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C1-C4)alkyl,

substituted or unsubstituted aryl-(C1-C4)alkoxy,

substituted or unsubstituted aryl-(C1-C4)heteroalkyl,

substituted or unsubstituted aryl-(C3-C6)alkenyl,

substituted or unsubstituted aryloxy-(C1-C4)alkyl,

substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,

substituted or unsubstituted heteroaryl,

substituted or unsubstituted heteroaryloxy,

substituted or unsubstituted heteroaryl-(C1-C4)alkyl,

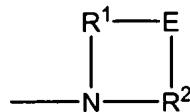
substituted or unsubstituted heteroaryl-(C1-C4)alkoxy,

substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,

substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,

substituted or unsubstituted heteroaryloxy-(C1-C4)alkyl, and

substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl, wherein R¹ and R² of -NR¹R² may be connected by a linking group E to give a substituent of the formula



wherein E represents a bond, (C1-C4) alkylene, or (C1-C4) heteroalkylene, and the ring formed by R¹, E, R² and the nitrogen contains no more than 8 atoms; provided that:

in the case that Y is -S(O₂)-, and R¹ is hydrogen or methyl, then R² is substituted heteroaryl group;

in the case that Y is -S(O₂)-, and R² is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R¹ is not hydrogen or R² is substituted by at least one substituent that is not hydrogen;

in the case that Y is -S(O₂)- and R² is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-1-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-1-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-1,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R¹ is a group other than hydrogen; and

said compound has pharmacological activity.

Claim 44 (currently amended): The method of claim 43 wherein, in the compound of formula I,

Y is SO₂ -SO₂- and

Z is NR¹R²; where R² is optionally substituted heteroaryl.

Claims 45-53 (canceled).

Claim 54 (original): The method of claim 43, wherein the disease state is atherosclerosis.

Claim 55 (original): The method of claim 43, wherein the disease state is pancreatitis.

Claim 56 (original): The method of claim 43, wherein the disease state is hypercholesterolemia.

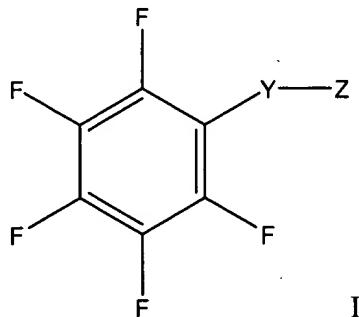
Claim 57 (original): The method of claim 43, wherein the disease state is hyperlipoproteinemia.

Claim 58 (original): The method of claim 43, wherein the composition is administered orally.

Claim 59 (original): The method of claim 43, wherein the subject is human.

Claim 60 (original): The method of claim 43, wherein the composition is administered in combination with a therapeutically effective amount of a hypolipemic agent or a hypocholesterolemic agent that is not represented by formula I.

Claim 61 (currently amended): A compound having the formula I:



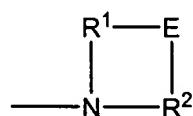
or a pharmaceutically acceptable salt thereof, wherein:

Y is -S(O)- or -S(O₂)-; and

Z is NR¹R², wherein R² is an optionally substituted heteroaryl group having only one or only two heteroatoms in the heteroaryl ring system thereof, and R¹ is selected from hydrogen, substituted or unsubstituted (C₂-C₁₀)(C₁-C₁₀)alkyl, substituted or unsubstituted (C₁-C₁₀)alkoxy,

substituted or unsubstituted (C3-C6)alkenyl,
substituted or unsubstituted (C2-C6)heteroalkyl,
substituted or unsubstituted (C3-C6)heteroalkenyl,
substituted or unsubstituted (C3-C6)alkynyl,
substituted or unsubstituted (C3-C8)cycloalkyl,
substituted or unsubstituted (C5-C7)cycloalkenyl,
substituted or unsubstituted (C5-C7)cycloalkadienyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aryloxy,
substituted or unsubstituted aryl-(C3-C8)cycloalkyl,
substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,
substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,
substituted or unsubstituted aryl-(C1-C4)alkyl,
substituted or unsubstituted aryl-(C1-C4)alkoxy,
substituted or unsubstituted aryl-(C3-C6)alkenyl,
substituted or unsubstituted aryloxy-(C1-C4)alkyl,
substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,
~~substituted or unsubstituted heteroaryl,~~
~~substituted or unsubstituted heteroaryloxy,~~
~~substituted or unsubstituted heteroaryl-(C1-C4)alkyl,~~
~~substituted or unsubstituted heteroaryl-(C1-C4)alkoxy,~~
~~substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,~~
~~substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,~~
~~substituted or unsubstituted heteroaryloxy-(C1-C4)alkyl, and~~
~~substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl,~~

wherein R¹ and R² of -NR¹R² may be connected by a linking group E to give a substituent of the formula



wherein E represents a bond, (C1-C4) alkylene, or (C1-C4) heteroalkylene, and the ring formed by R¹, E, R² and the nitrogen contains no more than 8 atoms; provided that:

in the case that Y is -S(O₂)-, and R¹ is hydrogen or methyl, then R² is a substituted heteroaryl group; and

in the case that Y is -S(O₂)-, and R² is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R¹ is not hydrogen or R² is substituted by at least one substituent that is not hydrogen;

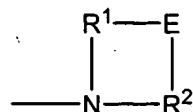
in the case that Y is -S(O₂)- and R² is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-1-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-1,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-1,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R¹ is a group other than hydrogen;

wherein said compound has pharmacological activity; and
with the proviso that heteroaryl is other than 4-pyrimidyl.

Claim 62 (previously presented): The compound of claim 61, wherein R¹ is hydrogen or lower alkyl, Y is -S(O₂)-, and there is no linking group E between R¹ and R².

Claims 63-88 (canceled).

Claim 89 (previously presented): The compound of claim 61, wherein



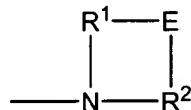
is a 5- or 6-membered heterocyclic ring.

Claims 90-94 (canceled).

Claim 95 (previously presented): A pharmaceutical composition of claim 1, wherein R¹ is hydrogen or lower alkyl, Y is -S(O₂)-, and there is no linking group E between R¹ and R².

Claim 96 (previously presented): A method of claim 43, wherein R¹ is hydrogen or lower alkyl, Y is -S(O₂)-, and there is no linking group E between R¹ and R².

Claim 97 (previously presented): A method of claim 43, wherein



is a 5- or 6-membered heterocyclic ring.

Claim 98 (currently amended): A compound of claim 61, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole, 5-Pentafluorophenylsulfonamidoindole; 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; ~~2,3-Dihydro-5-pentafluorophenylsulfonamidoindole~~; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; ~~5-Pentafluorophenylsulfonamidoindazole~~; 2-Methoxy-5-pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 99 (currently amended): A method of claim 43, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole, 5-Pentafluorophenylsulfonamidoindole; 4-Methyl-6-methoxy-2-

pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; ~~2,3-Dihydro-5-pentafluorophenylsulfonamidoindole~~; 5-Pentafluorophenylsulfonamidothiophene; 5-Pentafluorophenylsulfonamidoquinoline; ~~5-Pentafluorophenylsulfonamidoindazole~~; 2-Methoxy-5-pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 100 (currently amended): A compound of claim 61 [62], wherein R¹ is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 101 (previously presented): A method of claim 44, wherein R¹ is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 102 (new): A pharmaceutical composition of claim 1, wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 103 (new): A method of claim 43, wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 104 (new): A method of claim 43, wherein R² is a monocyclic heteroaryl group.

Claim 105 (new): A method of claim 43, wherein said R² heteroaryl group has only one heteroatom in the heteroaryl ring system.

Claim 106 (new): A method of reducing the level of low density lipoprotein particles levels or cholesterol in the blood of a mammalian subject in need thereof, which method comprises administering to said subject a therapeutically effective amount of a composition

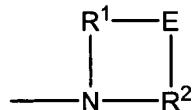
containing a compound of Claim 61, whereby said level of low density lipoprotein particles or cholesterol is reduced.

Claim 107 (new): A method of claim 106, wherein the subject is human.

Claim 108 (new): A compound of claim 61, wherein heteroaryl is selected from the group consisting of 2-pyrrolyl, 3-pyrrolyl, 3-pyrazolyl, 2-imidazolyl, 4-imidazolyl, pyrazinyl, 2-oxazolyl, 4-oxazolyl, 5-oxazolyl, 3-isoxazolyl, 4-isoxazolyl, 5-isoxazolyl, 2-thiazolyl, 4-thiazolyl, 5-thiazolyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrimidyl, 4-pyrimidyl, 5-benzothiazolyl, purinyl, 2-benzimidazolyl, 5-indolyl, 1-isoquinolyl, 5-isoquinolyl, 2-quinoxaliny, 5-quinoxaliny, 3-quinolyl, and 6-quinolyl.

Claim 109 (new): The compound of claim 108, wherein R¹ is hydrogen or lower alkyl, Y is -S(O₂)-, and there is no linking group E between R¹ and R².

Claim 110 (new): The compound of claim 108, wherein



is a 5- or 6-membered heterocyclic ring.

Claim 11 (new): The compound of claim 61, wherein R¹ is other than unsubstituted (C2-C10).